Inventor(s): Nicoletti et al.

Attorney Docket No.: 108910-00121

I. <u>AMENDMENTS TO THE CLAIMS</u>

Claim 1. (Currently Amended) Compositions of fluids for preparing A foaming agent composition for polymeric foams, consisting essentially of:

- HFC 365mfc from 5 to 8 parts by weight/100 parts of polymeric foam;
- one or more fluorinated compounds, liquid at room temperature and having boiling point from 50°C to 150°C, and having formula

wherein:

R' is- $(O)_{n0}$ - $C_nF_{2n}H$ or $-(O)_{n0}$ - C_nH_{2n+1} , n being an integer from 1 to 4; n0 is equal to 0 or 1;

R is: $-C_nF_{2n}H$ or $-C_mF_{2m+1}$; wherein n is as above; m is an integer from 1 to 3;

R_f is:

- linear or branched perfluoroalkylene, from 2 to 12 carbon atoms,
 containing at least one ether oxygen atom, when R_f has this
 meaning n0 in R' is equal to zero; or
- perfluoropolyoxyalkylene comprising units statistically distributed in the chain, the chain being formed of at least two carbon atoms, said units selected from:
 - (CFXO) wherein X = F or CF₃;
 - (CF₂(CF₂)_dO) wherein d is an integer comprised between 1 and 3; or
 - (C₃F₆O);

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when R_f is perfluoropolyoxyalkylene n0 in R' is 1; and one fluorine atom is optionally substituted with one chlorine atom in the end group R or R', and wherein the ratio by weight of the compounds of formula (I) to the HFC 365mfc ranges from 0.005:1 to 0.1:1.

Claim 2. (Canceled)

Claim 3. (Previously Presented) Compositions according to claim 1, wherein for polyurethane foams, the amount of the compounds of formula (I) ranges from 0.2 to 1.5 parts by weight referred to 100 parts by weight of polyol and HFC 365mfc amount ranges from 20 to 25 parts by weight/100 parts by weight of polyol.

Claim 4. (Previously Presented) Compositions according to claim 1, wherein the compounds of formula (I) have a molecular weight from 230 to 500.

Claim 5. (Previously Presented) Compositions according to claim 1, wherein the (C_3F_6O) unit in R_f of formula (I) is $(CF_2CF(CF_3)O)$ or $(CF(CF_3)CF_2O)$.

Claim 6. (Previously Presented) Compositions according to claim 1, wherein in formula (I) R is a group selected from-CF₂H, -CF₂CF₂H, or -CFHCF₃.

Claim 7. (Previously Presented) Compositions according to claim 1, wherein in formula (I) n0 of R' equal to 1, R_f is a (per)fluoropolyether chain selected from:

-(CF₂O)_a-(CF₂CF₂O)_b a and b being integers; when a is different from zero, then b/a is comprised
 between 0.3 and 10, extremes included; when a is equal to zero b is an integer.

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as defined below:

with R in formula (I) = $-C_nF_{2n}H$;

2) $-(CF_2-(CF_2)_z-CF_2O)_{b'}$

wherein z' is an integer equal to 1 or 2; b' is as defined below; or

3) $-(C_3F_6O)_{r}-(C_2F_4O)_{b}-(CFL_0O)_{t}$

$$L_0 = -F, -CF_3;$$

r, b and t being integers; when b and t are different from zero r/b = 0.5-2.0, (r+b)/t

= 10-30 and all the units having r, b, and t indexes are present;

or b = t = 0 and r satisfies the proviso indicated below;

or b = 0 and r and t are different from zero;

a, b, b', r, t, are integers whose sum is such that the compound of formula (I) containing the bivalent R_f radical has boiling point in the above range.

Claim 8. (Previously Presented) Compositions according to claim 1, wherein the fluids of formula (I) are selected from:

- $HCF_2O(CF_2CF_2O)_{1,8}(CF_2O)_{1,4}CF_2H$
- $HCF_2O(CF_2CF_2O)_2(CF_2O)_{0,7}CF_2H$
- $HCF_2O(CF_2CF_2O)_3(CF_2O)_{0,4}CF_2H$
- $CF_3O(CF_2CF_2O)_2CF_2H$
- $CF_3O(CF_2CF_2O)_2(CF_2O)CF_2H$
- CF₃O(CF₂CF(CF₃)O)₂CF₂H
- HCF₂CF₂O(CF₂CF₂O)CF₂CF₂H
- $\qquad \text{HCF}_2\text{CF}_2\text{OCF}_2\text{C}(\text{CF}_3)_2\text{CF}_2\text{OCF}_2\text{CF}_2\text{H} \\$
- CF₃(CF₂)₅OCF₂CF₂H

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- $CF_3(CF_2)_6OCF_2H$

- $HCF_2O(CF_2O)(CF_2CF_2O)CF_2H$
- $HCF_2O(CF_2O)(CF_2CF_2O)_2CF_2H$
- HCF₂O(CF₂CF₂O)₂CF₂H
- $HCF_2O(CF_2O)_2(CF_2CF_2O)CF_2H$
- CF₃(CF₂)₃OCH₃
- $CF_3(CF_2)_3OC_2H_5$ or
- CF₃(CF₂)₆OC₂H₅.

Claim 9. (Previously Presented) Compositions according to claim 8, wherein the fluids of formula (I) are selected from:

HCF₂O(CF₂O)(CF₂CF₂O)CF₂H, HCF₂O(CF₂O)(CF₂CF₂O)₂CF₂H,

 $HCF_2O(CF_2CF_2O)_2CF_2H$, $HCF_2O(CF_2O)_2(CF_2CF_2O)CF_2H$,

 $CF_3(CF_2)_3OCH_3$, $CF_3(CF_2)_3OC_2H_5$, or $CF_3(CF_2)_6OC_2H_5$.

Claim 10. (Previously Presented) Compositions according to claim 1, wherein the HFC 365mfc amount is substituted, up to 50% by weight of HFC 365mfc, by co-foaming agents selected from:

- hydrofluorocarbons selected from the group consisting of HFC 134a 1,1,1,2
 tetrafluoroethane CH₂F-CF₃, and HFC 227ea 1,1,1,2,3,3,3 heptafluoropropane
 CF₃-CHF-CF₃; or
- hydrocarbons having 5-6 carbon atoms, selected from the group consisting of: n-pentane, cyclopentane, isopentane, and n-hexane.

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Claim 11. (Previously Presented) Polymeric foams containing in percent by weight on

the total, from 5 to 10% of the compositions of claim 1.

Claim 12. (Previously Presented ended) Foams according to claim 11, wherein the

foams are either polyurethane or thermoplastic foams.

Claim 13. (Previously Presented) A method for preparing polymeric foams having

thermoinsulating properties, where the compositions of fluids of claim 1 are used.

Claim 14. (Previously Presented) Compositions according to claim 1, wherein the

polymeric foams are polyurethane foams.

Claim 15. (Previously Presented) Compositions according to claim 1, wherein the

compounds of formula (I) have a boiling point from from 60°C to 130°C.

Claim 16. (Previously Presented) Compositions according to claim 1, wherein in

formula (I) n is 1 or 2.

Claim 17. (Previously Presented) Compositions according to claim 1, wherein the

linear or branched perfluoroalkylene of R_f in formula (I) has 3 to 12 carbon atoms.

Claim 18. (Previously Presented) Compositions according to claim 2, wherein the ratio

by weight of the compounds of formula (I) to the HFC 365mfc ranges from 0.01:1 to

0.08:1.

Claim 19. (Previously Presented) Compositions according to claim 4, wherein the

compounds of formula (I) have a molecular weight of from 250 to 450.

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Claim 20. (Previously Presented) The method of claim 13, wherein the polymeric

foams are polyurethane foams.